Munich. One professor has retired from the church.

DR. GEORGE EDGAR VINCENT, professor of sociology and dean of the faculties of arts, literature and science in the University of Chicago, has been appointed president of the University of Minnesota.

BARTHOLOMEW J. SPENCE, Ph.D. (Princeton, 1909), has been made assistant professor of physics in the University of North Dakota, and Edward B. Stephenson, Ph.D. (Illinois, 1910), instructor in physics in the same institution. Dr. Spence was assistant in physics at Wisconsin 1905–06; instructor at Illinois 1906–07, and instructor at Princeton 1909–10. He has had several years of teaching experience in the high schools of Illinois and in Knox Academy. Other appointments at North Dakota are E. C. Griess, E.E. (Purdue), as instructor in mechanical drawing, and William E. Henwood (Armour Institute, 1910), instructor in mechanical engineering. William T. Wells, M.D. (Ann Arbor), has accepted a position in the Public Health Laboratory, and Robert P. Stark, M.D. (Ann Arbor), and Carl F. Raver, M.D. (Ann Arbor), in the branch laboratories, located, respectively, at Minot and Bismarck.

DR. ALBERT EINSTEIN, professor of physics at Zurich, has been called to the chair of mathematics and physics in the University of Prague.

DISCUSSION AND CORRESPONDENCE

CALENDAR REFORM

TO THE EDITOR OF SCIENCE: In Professor Chamberlin's discussion on "The Reform of the Calendar," in SCIENCE of November 25, 1910, after reference to discussions on the subject by Reininghaus, Slocum, Cotsworth, Patterson and Dabney, the suggestion is made that 364 days be divided into four quarters, each to consist of three months of four weeks each and a "close week," to be called: (1) Easter Week between March and April, (2) Julian Week between June and July, (3) Gregorian Week between September and October and (4) Christmas Week between December and January, these *close weeks* to be named and known in addition to the twelve months; and the odd days (365th every year, and 366th in every fourth year), which are to be placed between Christmas Week and January, are to belong to no month or week, are not to be named as days of the week, but only as New Year's Day and Leap Day, respectively, but they are to be counted with the days of the old year. Thus every year, every month, and every week is to begin with the same day of the week, this day to be Monday.

Professor Chamberlin advises that sufficient study should be given to this subject from all points of view, so that the new calendar may be "so well matured before its adoption is seriously urged that it will not itself need to be laid aside for something better by the time it has fairly come into use."

In accordance with this advice I beg to point out some objections to the calendar proposed and to suggest a calendar which includes the advantages and eliminates the objections.

To omit certain weeks from the designated months and to omit certain days from both the recognized weeks and the named months are serious objections, as would be similar omissions in the division of any whole into its parts. To change the first day of the week from Sunday to Monday adds confusion without any apparent benefit. To introduce four names (for the *close weeks*) in addition to the twelve names of months is less objectionable, but to eliminate a day, or two days, from the weekly measure of days is the point of paramount objection; and I predict that no calendar which requires such elimination will ever be accepted, primarily because of the law recognized for four thousand years, which reads:

> Remember the Sabbath Day to keep it holy.
>
> Six days [not seven or eight] shalt thou labor, and do all thy work:
>
> But the seventh day [not the eighth, nor even the seventh and eighth] is the sabbath of the Lord thy God; in it thou shalt not do any work.

Will Jews and Christians set aside this law for one week each year?

The calendar I would suggest puts four weeks of seven days each in eight months, and five weeks of seven days in March, June, September and December. Every fifth year a leap week is added to December, except that the last leap week is omitted each forty years, save the tenth; and each 20,000 years, save the tenth—time periods being reckoned since Christ. Thus there would be no leap week in 1960, 2040, 2080, etc., but there would be in 2000, 2400, 2800, etc., and again there would be no leap week in 20,000, 40,000, 60,000, etc., but there would be in 200,000, 400,000, 600,000, etc.

This provides for exactly the same number of days in a four-hundred-year period as the current calendar, and it makes a necessary correction beyond the four-hundred-year periods not provided for in the Gregorian calendar, thus reducing the error in the average length of the year from 26 seconds to less than 1 second.

Even the present calendar must be corrected daily for any exact measurements or computations; while, with the great meteorological variations in seasons, the adjustment proposed for the five- and forty-year periods could not be detected in single-year weather records and would be quite as acceptable as present adjustments for the four-year and century periods.

We are already accustomed to months with the number of days varying from 28 to 31. Indeed, probably half the people look to the wall calendar to learn how many days the month contains; and to date a letter "September 35" or even "December 42" (once in five years) would be systematic and simple in comparison with "Gregorian Week 7" or "New Year's Day, 1911," when that is to designate not the first day, but the last day of 1911.

It is suggested that the calendar proposed above be considered as becoming effective on Sunday, January 1, 1956; that it be called *Peace Calendar* and its inauguration mark the beginning of permanent peace among the civilized nations, time thereafter being designated P.C., when necessary to distinguish from O.S. or N.S.

Cyril G. Hopkins
University of Illinois,
December 1, 1910

Amœba meleagridis

To the Editor of Science: In a recent issue of Science[1] Dr. Theobald Smith makes certain comments on a recent published report[2] by the undersigned, in which he dissents from the position taken by us regarding the relation of blackhead in turkeys to avian coccidiosis. Little is to be gained by a controversial discussion which makes no mention of details, and such will not be undertaken in this communication, but there are one or two points in Dr. Smith's communication which deserve notice.

The writers made observations which showed the relation of coccidiosis to certain cases of blackhead, and demonstrated what they believed to be the relation of *Amœba meleagridis* to the coccidium described. The evidence for the conclusions can not be repeated here; for the details the reader is referred to the bulletin in question. It may be said, however, as a result of further investigations by one of the writers, that some confusion probably existed between certain stages of the coccidium and stages in the development of certain flagellated organisms, but neither the earlier observations of the undersigned, nor any that have been made more recently by one of the writers, have given any warrant for assuming the existence of *Amœba meleagridis*. The reasons for not so considering the organisms found in the diseased tissues of turkeys affected with blackhead are stated in full in the report, and the only evidence which Dr. Smith has brought forward as supporting a contrary view, since the publication of his first description in 1895, is given in a foot-note to his recent communication (*loc. cit.*, p. 512),

[1] 1910, N. S., Vol. XXXII., No. 824, October 14, pp. 509–512.

[2] "Blackhead in Turkeys: A Study in Avian Coccidiosis," Bull. 141, Rhode Island Agricultural Experiment Station, 1910.